

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52002 Entry Year 2023 Acreage: 1,276

County Otsego

Management Area: AuSable Outwash

Revision Date: 2021-05-04

Stand Examiner: Matthew Foster

Legal Description:

T29N R1W Section 4, 5, 6, 7, and 8.

Identified Planning Goals:

To provide for the protection, integrated management and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental, and economic benefit of the State of Michigan.

Soil and topography:

Well drained Roselawn and Rubicon sands.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

Mixed private/state ownership in this compartment. State land is larger, manageable blocks but private/state line work will need to be done for most treatments.

Unique Natural Features:

Scattered small frost pockets have created unique landforms.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

This compartment is in the Au Sable River watershed, and contains Mud Lake, Clear Lake, and Ell Lake.

Wildlife Habitat Considerations:

Mixed oak and aspen provide food and cover for for a wide variety of species and this compartment receives relatively high amounts of use for wildlife related recreation.

Mineral Resource and Development Concerns and/or Restrictions

The nearest active sand/gravel pits are located four miles to the northwest, and there is potential for sand & gravel within the compartment. All State-owned mineral rights in the compartment are currently leased and in production for Antrim Shale gas. In addition, there is some potential for oil & gas from the Guelph (Niagaran) reef trend and future gas storage. The South Chester 15 gas storage field is less than three miles to the southwest. There is no known potential for metallic minerals in this part of the state.

Vehicle Access:

Most roads are pipelines or well access roads, the compartment has good access overall.

Survey Needs:

None needed.

Recreational Facilities and Opportunities:

A designated ATV trail traverses through the western portion of the compartment.

Fire Protection:

Mostly hardwood forest types so only moderate potential for major forest fires.

Additional Compartment Information:

The following reports from the Inventory are attached:

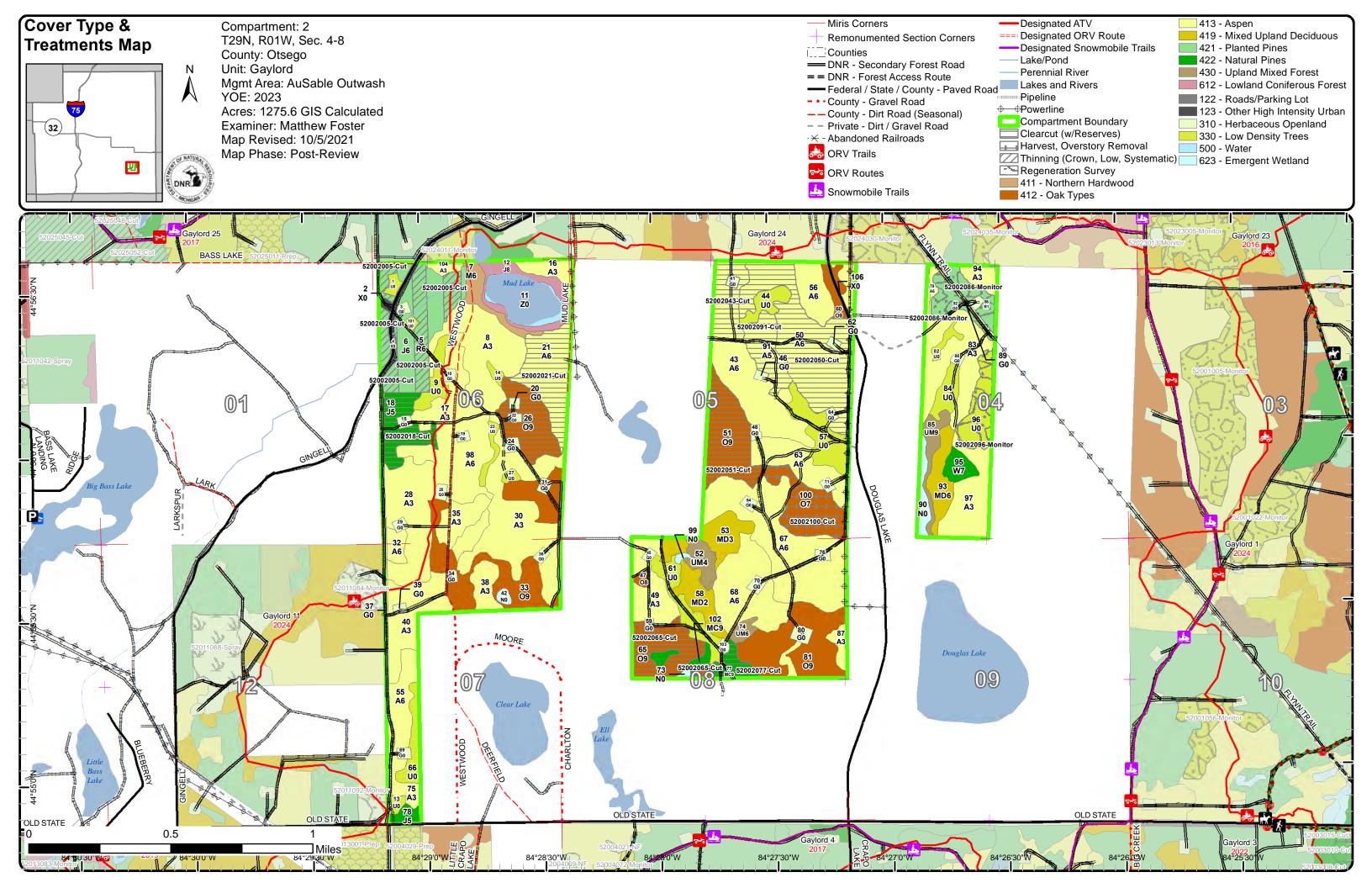
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

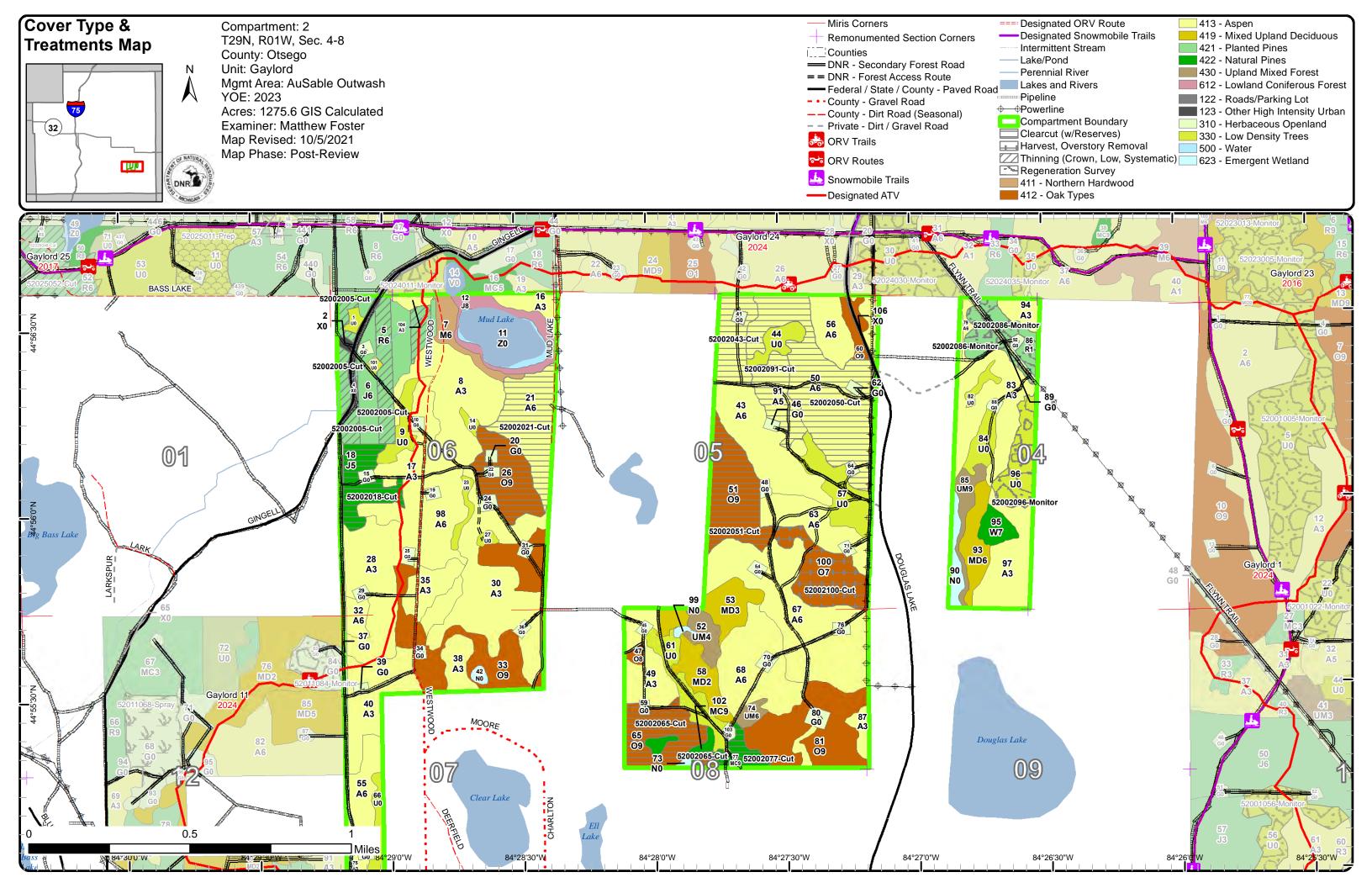
The following information is displayed, where pertinent, on the attached compartment maps:

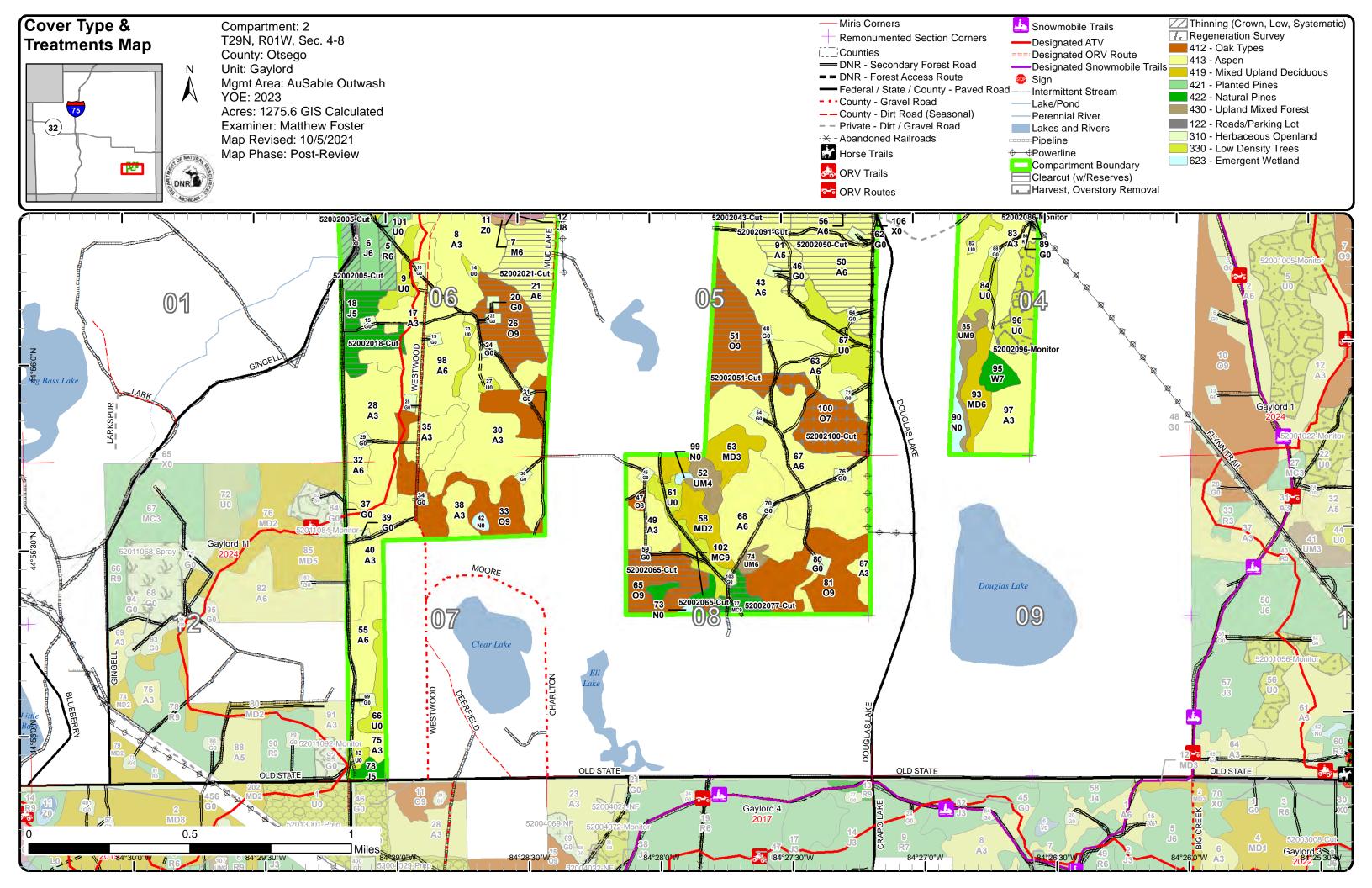
Base feature information, stand boundaries, cover types, and numbers

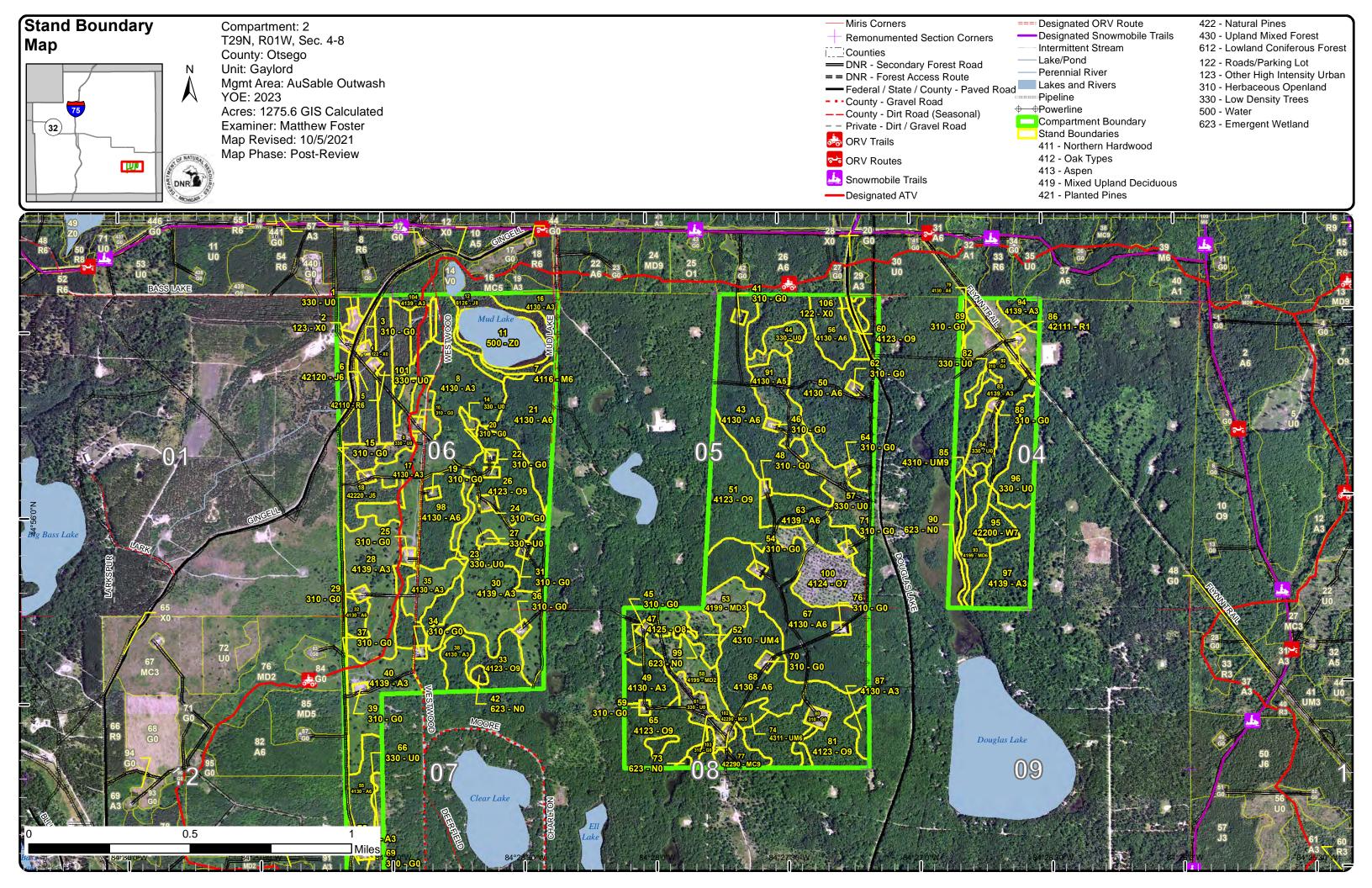
Proposed treatments
Site condition boundaries

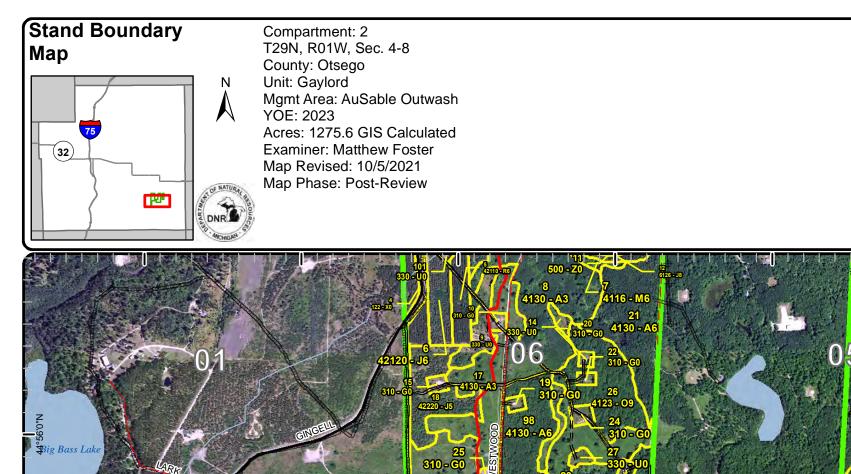
Details on the road access system

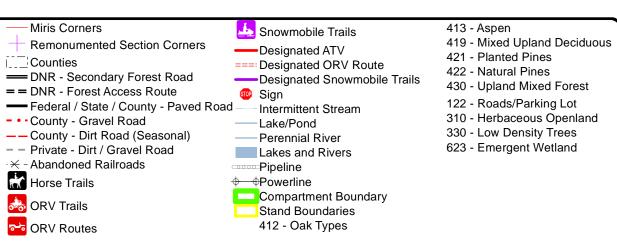


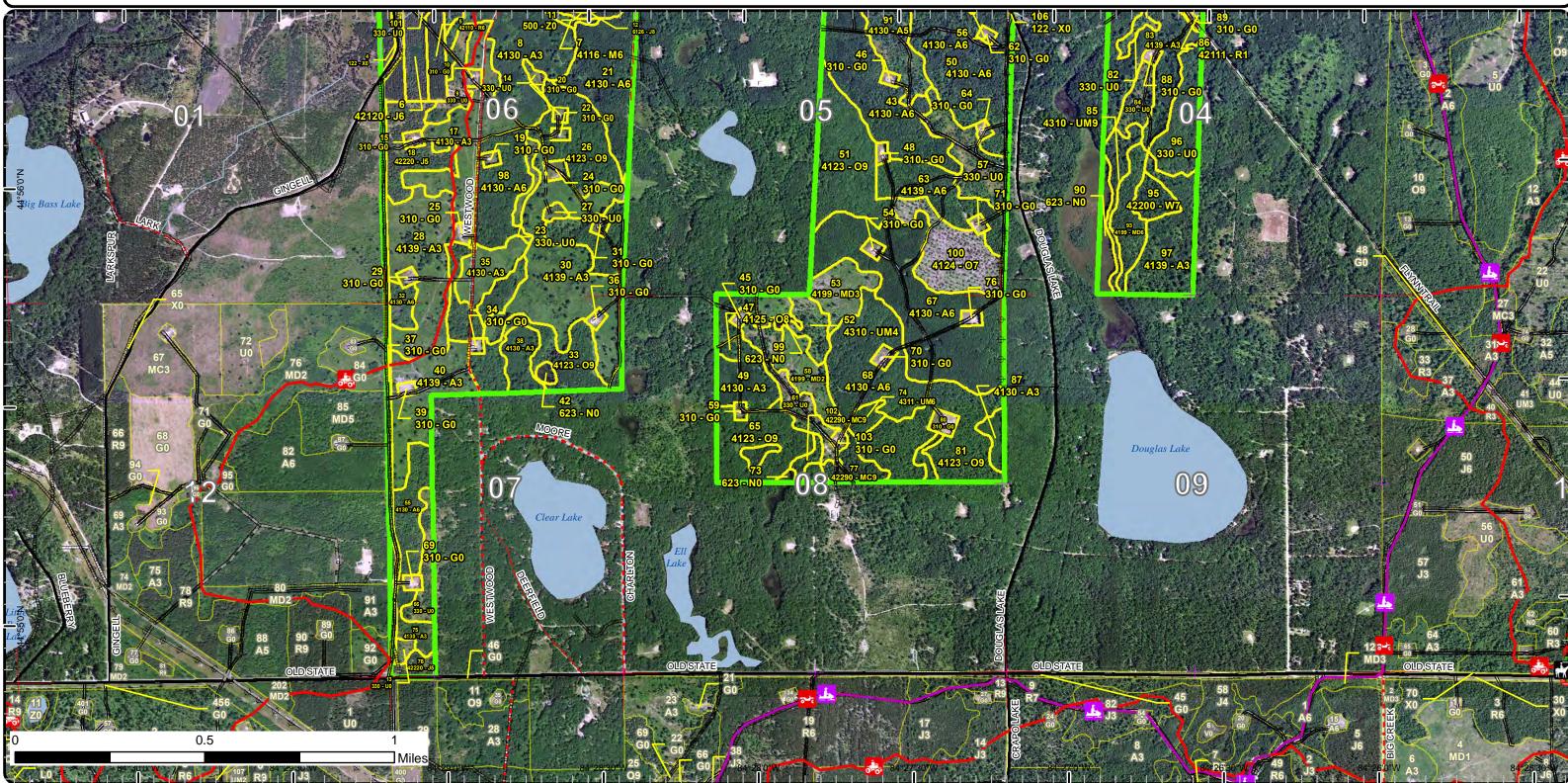


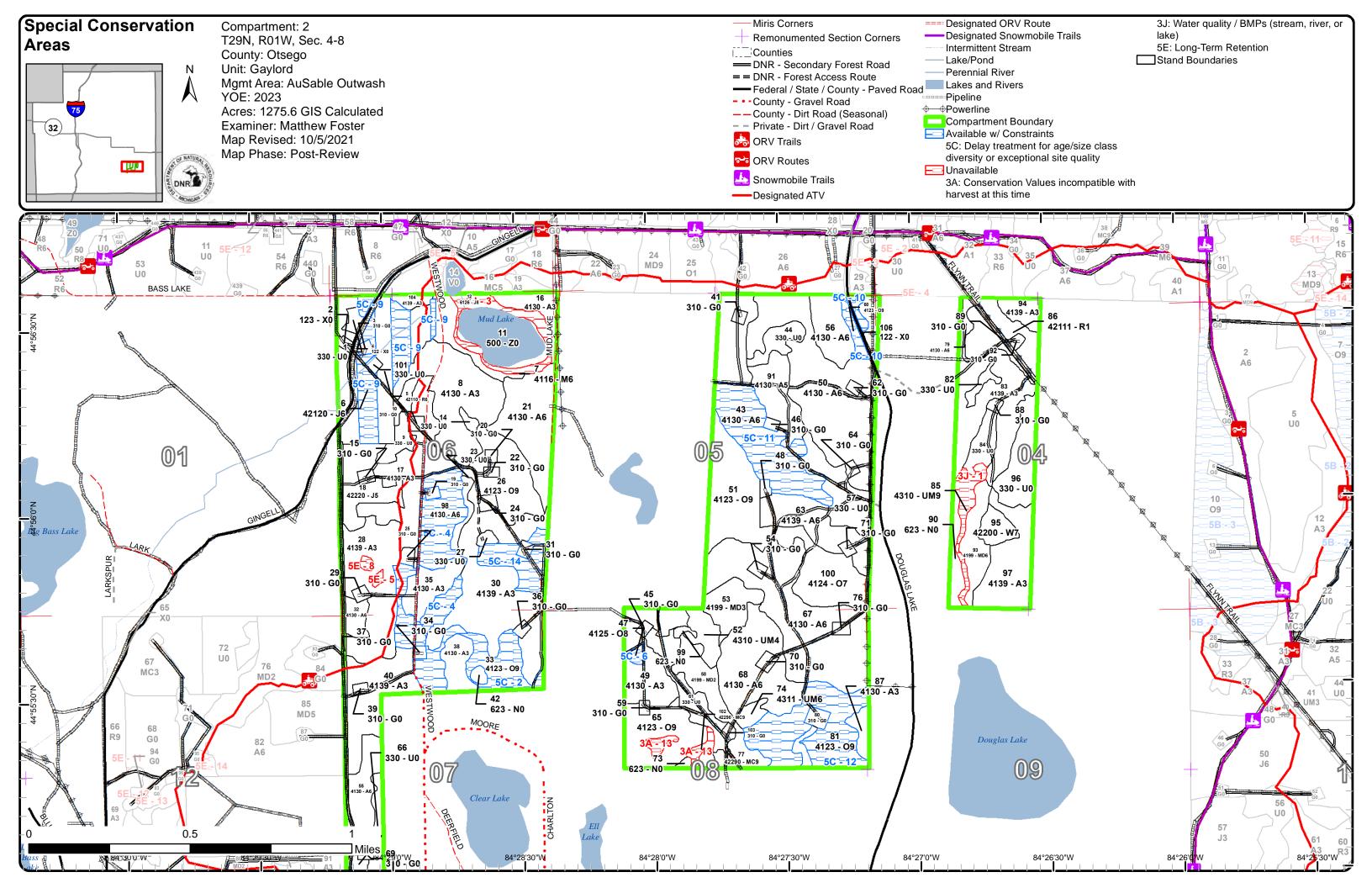


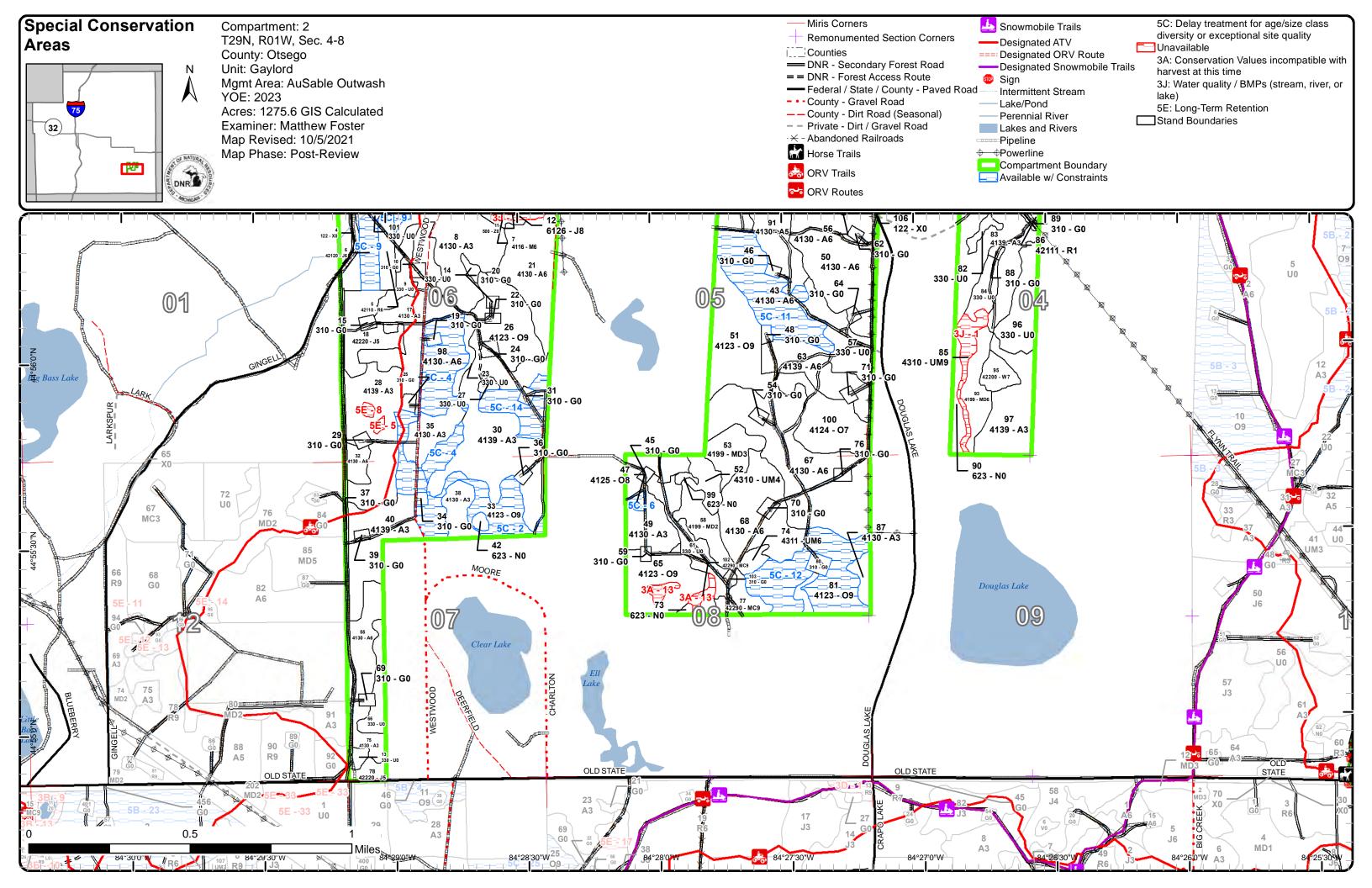












Gaylord Mgt. Unit

Compartment 2

Year of Entry 2023



Matthew Foster: Examiner

Age Class

	No.	A CONTRACTOR OF THE PROPERTY O	\$ / W	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				/ } /&		Ry &		S Ja	70,	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			84 / 42	St June	Lago Lago
Aspen	0	156	159	19	106	164	31	0	0	0	0	0	0	0	0	0	0	0	635
Herbaceous Openland	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Jack Pine	0	0	0	0	0	4	0	23	17	13	0	0	0	0	0	0	0	0	57
Low-Density Trees	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92
Marsh	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Mixed Upland Deciduous	0	30	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Oak	0	0	0	0	0	0	0	0	0	0	140	0	0	0	0	0	0	0	140
Red Pine	0	18	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	49
Upland Mixed Forest	0	0	0	0	0	0	0	3	0	8	9	0	0	0	0	0	0	0	19
Urban	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Water	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
White Pine	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
Total	180	204	159	19	119	168	31	57	17	21	171	0	0	0	0	0	0	0	1145



Report 2 – Treatment Summary

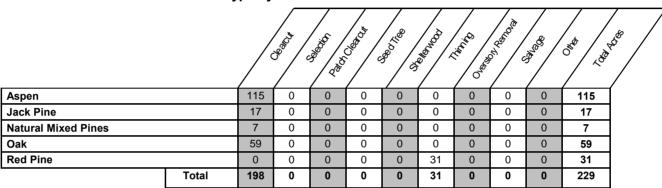
Gaylord Mgt. Unit Year of Entry: 2023

Acres of Harvest

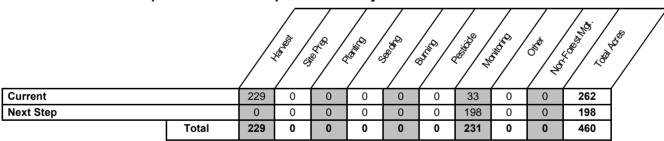
Compartment 2
Total Compartment Acres: 1,276

Commercial Harvest - 229 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Gaylord Mgt. Unit Report 3 -- Treatments

S t а n

d

Year of Entry: 2023

Compartment: 2

Treatment Acres Stand Size Stand BA **Treatment Treatment** Cover Type Age Habitat Method Objective Name CoverType Density Age Range Type Structure Cut

Approved Treatments:

52002005-Cut 31.3 42110 - Planted Poletimber 171-Harvest Crown Thinning 4211 - Planted Even-Aged No Red Pine Well 200 Red Pine

Prescription Thin stand down to 120BA. Focus on removing suppressed and poor quality trees. Add ORV trail protection specs.

Specs:

Next Step

Treatments:

<u>Acceptable</u>

Regen:

<u>Other</u>

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

52002018-Cut 17.2 42220 - Natural Poletimber 51-80 Clearcut with 4199 - Other 72 Harvest Even-Aged No Jack Pine Medium Retention Mixed Upland Deciduous

Prescription Final harvest all species, leave minimum island retention.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any combination of red maple, aspen, oak, jack pine, red pine. North half of the stand is expected to be lower stocking and that is

Regen: acceptable.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

52002021-Cut 30.7 4130 - Aspen Poletimber 52 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No Well Retention

Prescription Final harvest all trees leaving island retention. Focus retention around areas with oak to provide mast for wildlife. Follow BMP's near Mud

Lake and the small wetland in the middle of the stand. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, red maple, oak

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Proposed Start Date: 10/1 /2022

Other Comment: Site Condition

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 2 S Year of Entry: 2023 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment** Cover Type Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d 77 52002077-Cut 7.3 42290 - Natural Sawtimber 51-80 Harvest Clearcut 4199 - Other Even-Aged No Mixed Pine Mixed Upland Well Deciduous Prescription Final harvest, no retention due to small stand size. Try to protect existing oak regeneration as much as possible during harvest operations. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Oak, aspen, maple, red pine, white pine. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2022 86 52002086-16.8 42111 - Planted Sapling Immatu Monitoring Artificial 4211 - Planted Even-Aged No Red Pine, Mixed Red Pine Monitor Poor Regen(3yr) re Deciduous **Prescription** Specs: Next Step **Treatments:** Acceptable A red pine plantation that meets stocking requirements. Regen: **Other** Percent to Treat = 100% Comment: Site Condition Proposed Start Date: 10/1 /2021 52002096-16.1 330 - Low-Density Nonstocked 0 Natural Regen 4123 - Red Oak Two-Aged No 96 Unspec Monitoring Trees (Intermediate) Monitor ified **Prescription** Specs: Next Step **Treatments:** Acceptable A mix of red oak, maple, and aspen, that is at least 33% percent oak, that meets minimum stocking requirements. Regen: Other Percent to Treat = 100% Comment:

Total Treatment 262 Acreage Proposed:

Proposed Start Date: 10/1 /2024

Site Condition

Gaylord Mgt. Unit

Matthew Foster : Examiner

Compartment: 2 Year of Entry: 2023

Availa	ability for	Managemer	nt		
Total	Acres	Acres Avail	Acres		Dominant Site Conditions
Acres	Available	With Condition	Not Available		3J
2	2	0	0	Aspen	
28	28	0	0	Herbaceous Openland	
	0	0	0	Jack Pine	
5	5	0	0	Low-Density Trees	
1	1	0	0	Marsh	
	0	0	0	Mixed Upland Deciduous	
	0	0	0	Natural Mixed Pines	
9	9	0	0	Northern Hardwood	0
	0	0	0	Oak	
	0	0	0	Red Pine	
3	3	0	0	Upland Mixed Forest	
7	7	0	0	Urban	
	0	0	0	Water	
	0	0	0	White Pine	
56	56		0	Total Forested Acres	0
	100%		0%	Relative Percent	

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	33	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Gaylord Mgt. Unit

Matthew Foster : Examiner

Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	23	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
	Comments: Available Comments: Unavailable Comments: Available Comments: Unavailable Available Available	Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention Comments: 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: 5C: Delay treatment for age/size class diversity or exceptional site quality	(stream, river, or lake) Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention 1 Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention 1 Comments: 4vailable 5E: Long-Term Retention 1 Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality 23	Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention 1 Unspecified Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention 1 Unspecified Comments: Unavailable 5C: Delay treatment for age/size class diversity or exceptional site quality Unspecified Comments:	Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention 1 Unspecified Unspecified Comments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable 5E: Long-Term Retention 1 Unspecified Unspecified Comments: Unavailable 5E: Long-Term Retention 1 Unspecified Unspecified Comments: 2 Unspecified Unspecified Comments: 2 Unspecified Unspecified Unspecified Comments:	Comments: Available SC: Delay treatment for age/size class diversity or exceptional site quality Unavailable SE: Long-Term Retention 1 Unspecified Unspecified Unspecified Comments: Available SC: Delay treatment for age/size class diversity or exceptional site quality Unavailable SC: Delay treatment for age/size class diversity or exceptional site quality Comments: Unavailable SE: Long-Term Retention 1 Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Comments: Unavailable SE: Long-Term Retention 1 Unspecified Unspecified Unspecified Comments: Available SC: Delay treatment for age/size class diversity or exceptional site quality 23 Unspecified Unspecified Unspecified Unspecified Unspecified

Report 4 – Site Conditions

Gaylord Mgt. Unit
Matthew Foster : Examiner

10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	36	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	40	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
13	Unavailable	3A: Conservation Values incompatible with harvest at this time	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: _eave for diversity	on the landscape.					
14	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Mgt. Unit Compartment:
Year of Entry

Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS



* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservation Type Description
Area

ERA = Ecological Reference Area

HCVA = High Conservation Value Area

SCA = Special Conservation Area



Stand	Level 4 C	Level 4 Cover Type		Level 4 Cover Type	Level 4 Cover Type		Cover Type Size Density			Acres	Stand Age B	A Range	Managed S	Site	General Comments
1	330 - Low-			330 - Low-Density Trees Nonstocked		ocked	1.9	U	nspecified	No		Former St Charlton 2-6 (plugged in 1985 & 2010). Site of restoration study with the Au Sable Institute between 2014-2019. Study was authorized under land use permit and MOU. Results of the study are housed with Land Use Program Specialist. Seeding in with some jack pine and red pine.			
2	123 - Other Hig	gh Intensity	Urban	Nonstocked		1.0	I	lmmature			CPF site with a compressor building and tank battery. BreitBurn Operating State Charleton 4-6 SWD. Most of the stand area is occupied by infrastructure.				
3	310 - Herbac	eous Open	ıland	Nonst	ocked	1.0					Gas well, BreitBurn Operating State Charleton 7-6.				
4	122 - Roa	d/Parking L	ot	Nonst	ocked	5.6			No		Gingell Road and adjacent cleared area used for a utility corridor.				
5	42110 - Pla	nted Red P	ine	Poletim	oer Well	l 31.3	66	171-200	N/A		This stand was row thinned in 2005, looks like rows were tight so they did				
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	a cut 2, leave 3-5 rows depending where you are in the stand. BA is 175				
	Quaking Aspen	2	Pole	8			d Maple	Low	5 - 10 feet	Sapling	from 7 plots. Understory is variable, open in some areas and thick in others.				
	Red Pine	95	Pole/Log	9	66		rry (Juneberry)	Low	5 - 10 feet	Tall Shruk	1 1 1 1 1 1				
	Red Maple	2	Pole/Log	9			Cherry	Low	5 - 10 feet	Sapling					
	Red Oak	1	Log	13		Northe	ern Pin Oak	Low	5 - 10 feet	Sapling					
6	42120 - Pla	nted Jack F	Pine	Poletim	er Well	l 22.9	66	51-80	N/A		This stand was thinned in 2005 when the adjacent red pine was thinned.				
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Since rows in this jack pine stand were irregular, the harvest specs simply called for removing 10 foot wide alternating strips. Understory is				
	Quaking Aspen	3	Pole	8		Re	d Maple	High	10 - 20 feet	Sapling	dense due to previous thinning, some decline is occuring in the jack pine,				
	Jack Pine	95	Pole	8	66	E	Beech	Low	5 - 10 feet	Sapling	poor quality.				
	Red Pine	1	Log	15		Pir	Cherry	Low	5 - 10 feet	Sapling					
	Red Oak	1	Log	14		Northe	ern Pin Oak	Medium	5 - 10 feet	Sapling					
						Bigto	oth Aspen	Low	10 - 20 feet	Sapling					
7	4116 - Mixed N.	Hardwood	- Aspen	Poletimb		J 9.1	90	81-110	N/A		This is a low quality stand. Red maple is dominant overall but aspen is concentrated in some portions of the stand, especially near the road.				
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	There is a very heavy shrub understory in this stand. This stand was left				
	Red Maple	60	Pole/Log	9	90	Re	d Maple	Low	5 - 10 feet	Sapling	uncut when adjacent stands were harvested most likely so that it could				
	Bigtooth Aspen	11	Pole/Log	9			ut (Beaked)	Medium	5 - 10 feet	Tall Shrub	serve as a buffer to Mud Lake.				
١	Northern Pin Oak	5	Log	14			rry (Juneberry)	Medium	10 - 20 feet	Tall Shrub					
	Red Pine	2	Log	16		Pir	Cherry	Low	5 - 10 feet	Sapling					
	Jack Pine	5	Log/Pole	12		Northe	ern Pin Oak	Low	5 - 10 feet	Sapling					
		17													



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age B	A Range	Managed 9	Site	General Comments
8	4130	- Aspen		Sapling Well	41.4	17 I	Immature	N/A		Harvested in 2004, log sized oak left in clumps throughout the stand. Thick regeneration made of mostly aspen and red maple.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Trilick regeneration made of mostly aspen and red maple.
	Red Maple	20	Sapling	3	Wite	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Red Oak	5	Log/XLog	16	Servicebe	rry (Juneberry)	Low	10 - 20 feet	Tall Shrub	
	Quaking Aspen	55	Sapling	3 17						
	Northern Pin Oak	3	Sapling	3						
	White Pine	1	Sapling	3						
	Pin Cherry	6	Sapling	3						
	Bigtooth Aspen	10	Sapling	3						
9	330 - Low-I	Density Tree	es	Nonstocked	7.9	I	mmature	No		Semi-open valley of jack pine, cherry, and some aspen.
10	310 - Herbac	eous Openl	and	Nonstocked	1.3	U	nspecified			Gas well, Breitburn Operating State Charlton 2-6.
11	500 -	Water		Nonstocked	23.5			No		Mud Lake, water level is very high right now causing mortality in adjacent stand 12.
12	6126 - Lowl	and Jack Pi	ine Sa	awtimber Mediu	m 13.3	85	51-80	N/A		This stand rings Mud Lake. High water levels from the lake are flooding
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	this stand causing significant mortality of jack and red pine.
	Quaking Aspen	5	Log/Pole	10		ut (Beaked)	Low	5 - 10 feet	Tall Shrub	
	Red Pine	25	Log	14		rry (Juneberry)		10 - 20 feet	Tall Shrub	
	Jack Pine	70	Log/Pole	11 85		Cherry	Low	5 - 10 feet	Sapling	
					Northe	ern Pin Oak	Low	5 - 10 feet	Sapling	
14	330 - Low-l	Density Tree	es	Nonstocked	1.5			No		This is a depression with scattered cherry and old white pine stumps.
15	310 - Herbac	eous Openl	and	Nonstocked	1.3					Gas well, BreitBurn Operating State Charleton 8-6.
16	4130	- Aspen		Sapling Well	8.5	17 I	mmature	N/A		This was cut in 2004 along with stand 104 and 8. Good thick
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	regeneration, scattered white pine was left during the harvest.
	Red Maple	16	Sapling	3		rry (Juneberry)		10 - 20 feet	Tall Shrub	
	Red Oak	5	Log	14			1	1	1	1
	Quaking Aspen	70	Sapling	3 17						
	Northern Pin Oak	3	Sapling	3						
	White Pine	1	Log	12						
	***************************************		_09	12						



Stand	d Level 4 C	Level 4 Cover Type Size I		Size Density Acres Stand Age BA Ra				A Range	Managed S	ite	General Comments		
17		- Aspen		Sapling		32.7	7 I	Immature	N/A		Harvested in 2014, scattered oak and pine left throughout. Regeneration is coming back well.		
	Canopy Species		Size Class		Age								
	Quaking Aspen	60	Sapling	1	7								
	Red Maple	20	Sapling	1									
	Red Pine	1	Log	14									
	Red Oak Red Oak	5	Log	13									
	Black Cherry	10	Sapling	1									
	Jack Pine	3	Sapling Sapling	1									
	Jack i lile	3	Заріігід	- '									
18	42220 - Nat	tural Jack Pi	ne Po	letimbe	Mediur	m 17.2	72	51-80	N/A		This is not a fully stocked stand, jack pine and aspen are low quality. Jack pine is dying out. South half of stand has a denser understory of rec		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	maple, north half less dense and a more pure overstory of jack pine.		
	Red Maple	5	Pole	9		Re	d Maple	High	10 - 20 feet	Sapling			
	Quaking Aspen	10	Pole	8		Wh	nite Pine	Low	Variable	Sapling			
	Jack Pine	80	Pole/Log	9	72	Pir	n Cherry	Low	5 - 10 feet	Sapling			
	Red Pine	5	Log/Pole	13		Northe	ern Pin Oak	Low	5 - 10 feet	Sapling			
						Ja	ck Pine	Low	Variable	Sapling			
19 20	310 - Herbac 310 - Herbac	· 		Nonsto		1.0					Gas well, BreitBurn Operating State Charleton 5-6. Gas well, BreitBurn Operating State Charleton 11-6.		
21	4130												
		- Aspen	P	Poletimb	er Well	30.7	52	81-110	N/A		This stand was cut in 1969. Red maple is slightly smaller in diameter,		
	Canopy Species		Size Class		er Well		52 nopy Species		N/A Avg. Height	Size	and a lot of it is still in the understory. Small wet area included (<.5 acre)		
	Canopy Species Red Maple					Sub-Ca				Size Sapling	This stand was cut in 1969. Red maple is slightly smaller in diameter, and a lot of it is still in the understory. Small wet area included (<.5 acre) near the middle of the stand. Scattered large oak left from the harvest.		
		% Cover	Size Class	DBH		Sub-Ca Re	nopy Species	Density	Avg. Height		and a lot of it is still in the understory. Small wet area included (<.5 acre)		
	Red Maple	% Cover	Size Class Pole	DB H		Sub-Ca Re	nopy Species d Maple	Density Medium	Avg. Height >20 feet	Sapling	and a lot of it is still in the understory. Small wet area included (<.5 acre) near the middle of the stand. Scattered large oak left from the harvest.		
	Red Maple Red Oak	% Cover 8 6	Size Class Pole Log	7 16		Sub-Ca Re E Wit	nopy Species d Maple Beech	Density Medium Low Low	Avg. Height >20 feet 5 - 10 feet	Sapling Sapling	and a lot of it is still in the understory. Small wet area included (<.5 acre) near the middle of the stand. Scattered large oak left from the harvest.		
	Red Maple Red Oak Paper Birch	% Cover 8 6	Pole Log Pole	7 16 7	I Age	Sub-Ca Re B With	nopy Species d Maple Beech ch Hazel	Density Medium Low Low	Avg. Height >20 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling Tall Shrub	and a lot of it is still in the understory. Small wet area included (<.5 acre) near the middle of the stand. Scattered large oak left from the harvest.		
	Red Maple Red Oak Paper Birch Bigtooth Aspen	% Cover 8 6 1 45	Pole Log Pole Pole/Log	7 16 7	I Age	Sub-Ca Re B Wit Servicebe	nopy Species d Maple Beech ch Hazel erry (Juneberry)	Density Medium Low Low Low	>20 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet	Sapling Sapling Tall Shrub Tall Shrub	and a lot of it is still in the understory. Small wet area included (<.5 acre) near the middle of the stand. Scattered large oak left from the harvest.		
	Red Maple Red Oak Paper Birch Bigtooth Aspen	% Cover 8 6 1 45 40	Size Class Pole Log Pole Pole/Log Pole	7 16 7	52	Sub-Ca Re B Wit Servicebe	nopy Species d Maple Beech ch Hazel erry (Juneberry) horn (spp.)	Density Medium Low Low Low Low Low	Avg. Height >20 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet	Sapling Sapling Tall Shrub Tall Shrub Tall Shrub	and a lot of it is still in the understory. Small wet area included (<.5 acre) near the middle of the stand. Scattered large oak left from the harvest.		
22	Red Maple Red Oak Paper Birch Bigtooth Aspen Quaking Aspen 310 - Herbac	% Cover 8 6 1 45 40	Pole Log Pole Pole/Log Pole	7 16 7 9 8	52	Sub-Ca Re I Wit Servicebe Hawtl	nopy Species d Maple Beech ch Hazel erry (Juneberry) horn (spp.)	Density Medium Low Low Low Low Low	Avg. Height >20 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet	Sapling Sapling Tall Shrub Tall Shrub Tall Shrub	and a lot of it is still in the understory. Small wet area included (<.5 acre) near the middle of the stand. Scattered large oak left from the harvest.		



Stand		over Type		Level 4 Cover Type			Level 4 Cover Type 310 - Herbaceous Openland			••			Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	
25	310 - Herbac	eous Openl	and	Nonsto	ocked	1.4					Gas well, BreitBurn Operating State Charleton 1-6.										
27	330 - Low-	Density Tree	es	Nonstocked		Nonstocked		Nonstocked		Nonstocked		Nonstocked		Nonstocked		1.5		Unspecified	No		Semi-open area of pole size cherry and log sized red pine, most likely planted. This was an old well site that was plugged in 1977. Ground cover is sweet fern and knapweed.
28	4139 - Aspen,	Mixed Decid	duous	Sapling		37.3	7	Immature	N/A		Harvested in 2014 with adjacent stands 17 and 40. This stand is similar										
	Canopy Species	% Cover	Size Class	DBH	l Age						to those just with a little less aspen and some open areas still filling in. Could be considered one stand with adjacent stands in the future. Old										
	Red Pine	1	Log	14							notes indicate this was a variable stand and that is showing in the										
	Red Oak	1	Log	14							regeneration. Scattered oak and pine left, in addition to two retention										
	White Pine	1	Log	14							islands left in the middle.										
(Quaking Aspen	40	Sapling	1	7																
	Red Maple	27	Sapling	1																	
	Black Cherry	15	Sapling	1																	
	Red Oak	5	Sapling	1																	
	White Pine	5	Sapling	2																	
Е	Bigtooth Aspen	5	Sapling	1																	
29	310 - Herbac	eous Openl	and	Nonsto	ocked	1.2					Gas well, BreitBurn Operating State Charleton 9-6.										
30	4139 - Aspen,	Mixed Decid	duous	Sapling	g Well	57.4	7	Immature	N/A		Harvested in 2014, scattered oak and pine left throughout. Good										
	4139 - Aspen, Canopy Species		duous Size Class	. `	y Well		7 nopy Specie		N/A Avg. Height	Size	Harvested in 2014, scattered oak and pine left throughout. Good regeneration, around 10ft tall in most spots.										
-				. `		Sub-Ca				Size Tall Shrub	regeneration, around 10ft tall in most spots.										
E	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height		regeneration, around 10ft tall in most spots.										
E	Canopy Species Bigtooth Aspen	% Cover 40	Size Class Sapling	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height		regeneration, around 10ft tall in most spots.										
E	Canopy Species Bigtooth Aspen Quaking Aspen	% Cover 40 19	Size Class Sapling Sapling	DBH 1	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height		regeneration, around 10ft tall in most spots.										
E	Canopy Species Bigtooth Aspen Quaking Aspen Red Maple	% Cover 40 19 25	Size Class Sapling Sapling Sapling	1 1 1	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height		regeneration, around 10ft tall in most spots.										
E	Canopy Species Bigtooth Aspen Quaking Aspen Red Maple Red Oak	% Cover 40 19 25 5	Size Class Sapling Sapling Sapling Sapling Sapling	DBH 1 1 1 1	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height		regeneration, around 10ft tall in most spots.										
E	Canopy Species Bigtooth Aspen Quaking Aspen Red Maple Red Oak Black Cherry	% Cover 40 19 25 5 8	Size Class Sapling Sapling Sapling Sapling Sapling Sapling	DBH 1 1 1 1 1 1 1	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height		regeneration, around 10ft tall in most spots.										



tand	Level 4 Co	evel 4 Cover Type Size Density		nsity	Acres Stand Age E	Managed S	Site	General Comments		
32	4130	- Aspen	Р	oletimb	er Well	4.9 46	1-50	N/A		This stand was cut in 1975, oak and pine residual were left throughout.
(Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Canopy Species	Density	Avg. Height	Size	Most of the residual trees are at the north and south ends of this stand, looks like a storm blew them over in the middle. Not great growth on the
	Red Maple	17	Pole/Sapling	5		Pin Cherry	Low	5 - 10 feet	Sapling	regeneration from the cut due to the amount of residual that was left.
Q	uaking Aspen	60	Pole/Sapling	5	46	White Pine	Low	Variable	Sapling	
No	orthern Pin Oak	3	Log	14		Red Maple	Medium	Variable	Sapling	
No	orthern Pin Oak	10	Pole/Sapling	5						
	White Pine	5	Log	13						
	Red Pine	5	Log	15						
33	4123 -	Red Oak	S	awtimb	er Well	33.2 95	111-140	N/A		It does not appear that this has been treated in recent history. This is
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	predominantly a sawlog oak stand with some big pine and aspen scattered throughout. The easternmost lobe of the stand has a lot of
	Red Maple	14	Pole/Log	9		Red Maple	Medium	>20 feet	Sapling	white pine in the understory. This portion also has an old railroad grade
	Red Oak	75	Log/XLog	16	95	Red Oak	Low	5 - 10 feet	Sapling	through it. Large valley in this stand north of adjacent stand 42. Overall
В	sigtooth Aspen	4	Log/Pole	10		White Pine	Medium	Variable	Sapling	the oak looks to be in good shape considering its age.
	White Pine	2	Log	16		Witch Hazel	Low	5 - 10 feet	Tall Shrub	
	Red Pine	4	Log/XLog	16		Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub	
	White Oak	1	Log	15					'	
	Willia Oak	'	Log	13						
34	310 - Herbac			Nonsto	ocked	1.0				Gas well, Operating State Charleton 2-7.
		eous Open	land			1.0				Gas well, Operating State Charleton 2-7. Gas well, BreitBurn Operating State Charleton 3-7.
36	310 - Herbac	eeous Open	land	Nonsto	ocked	1.1	Jnspecified	No		· · ·
34 36 37	310 - Herbac 310 - Herbac 310 - Herbac	eeous Open	land	Nonsto	ocked	1.1 10.4	Jnspecified Immature	No N/A		Gas well, BreitBurn Operating State Charleton 3-7. Utility corridor with numerous underground gas pipe lines, seeding in wit pine in some spots. This was harvested in 2004, all oak was left. Some of this residual oak
36 37 38	310 - Herbac 310 - Herbac 310 - Herbac	eeous Open eeous Open eeous Open	land	Nonsto Nonsto Sapling	ocked	1.1 10.4	Immature		Size	Gas well, BreitBurn Operating State Charleton 3-7. Utility corridor with numerous underground gas pipe lines, seeding in wit pine in some spots.
36 37 38	310 - Herbac 310 - Herbac 310 - Herbac 4130	eeous Open eeous Open eeous Open	land	Nonsto Nonsto Sapling	ocked ocked	1.1 10.4 U	Immature Density	N/A	Size Tall Shrub	Gas well, BreitBurn Operating State Charleton 3-7. Utility corridor with numerous underground gas pipe lines, seeding in wit pine in some spots. This was harvested in 2004, all oak was left. Some of this residual oak has since died or blown over. The aspen regeneration is dense and doir
36 37 38	310 - Herbac 310 - Herbac 310 - Herbac 4130 Canopy Species	eeous Open eeous Open eeous Open - Aspen % Cover	land land Size Class	Nonsto Nonsto Sapling	ocked ocked	1.1 10.4 U 9.0 17 Sub-Canopy Species	Immature Density	N/A Avg. Height	1	Gas well, BreitBurn Operating State Charleton 3-7. Utility corridor with numerous underground gas pipe lines, seeding in wipine in some spots. This was harvested in 2004, all oak was left. Some of this residual oak has since died or blown over. The aspen regeneration is dense and doir
36 37 38	310 - Herbac 310 - Herbac 310 - Herbac 4130 Canopy Species Red Maple	eeous Open eeous Open eeous Open - Aspen % Cover	land land Size Class Sapling	Nonsto Nonsto Sapling DBH	ocked ocked	1.1 10.4 U 9.0 17 Sub-Canopy Species	Immature Density	N/A Avg. Height	1	Gas well, BreitBurn Operating State Charleton 3-7. Utility corridor with numerous underground gas pipe lines, seeding in wipine in some spots. This was harvested in 2004, all oak was left. Some of this residual oak has since died or blown over. The aspen regeneration is dense and doir
36 37 38	310 - Herbac 310 - Herbac 310 - Herbac 4130 Canopy Species Red Maple Red Oak	eeous Open eeous Open - Aspen **Cover** 19 5	land land Size Class Sapling Log	Nonsto Nonsto Sapling DBH 3 15	ocked ocked g Well	1.1 10.4 U 9.0 17 Sub-Canopy Species	Immature Density	N/A Avg. Height	1	Gas well, BreitBurn Operating State Charleton 3-7. Utility corridor with numerous underground gas pipe lines, seeding in wipine in some spots. This was harvested in 2004, all oak was left. Some of this residual oak has since died or blown over. The aspen regeneration is dense and doir
36 37 38	310 - Herbac 310 - Herbac 310 - Herbac 4130 Canopy Species Red Maple Red Oak digtooth Aspen	eeous Open eeous Open - Aspen **Cover** 19 5 70	land land Size Class Sapling Log Sapling	Nonsto Nonsto Sapling DBH 3 15 3	ocked ocked g Well	1.1 10.4 U 9.0 17 Sub-Canopy Species	Immature Density	N/A Avg. Height	1	Gas well, BreitBurn Operating State Charleton 3-7. Utility corridor with numerous underground gas pipe lines, seeding in wipine in some spots. This was harvested in 2004, all oak was left. Some of this residual oak has since died or blown over. The aspen regeneration is dense and doir



Stand	Level 4 Cover Type		Size Density	Acres	Stand Age I	BA Range	Managed S	Site	General Comments	
40	4139 - Aspen,	Mixed Deci	duous	Sapling Well	28.1	7	Immature	N/A		Harvested in 2014, scattered pine and oak left throughout. Regenerating
	Canopy Species	% Cover	Size Class	DBH Age						well, south finger is mostly red maple stump sprouts.
	Bigtooth Aspen	20	Sapling	1						
	Quaking Aspen	33	Sapling	1 7						
	Red Maple	25	Sapling	1						
	Red Oak	1	Log	13						
	Red Pine	1	Log	14						
	Black Cherry	15	Sapling	1						
	Red Oak	5	Sapling	1						
41	310 - Herbac	eous Open	land	Nonstocked	1.0					Gas well, BreitBurn Operating State Charleton 7-5.
42	623 - Emer	rgent Wetla	nd	Nonstocked	1.5			No		A pothole wetland with grasses and some leatherleaf. Looks pretty wet with water overflowing north into the valley in stand 33.
43	4130	- Aspen		Poletimber Well	53.1	49	81-110	N/A		This stand was harvested in 1972 with adjacent aspen stands 91 and 50
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	North half of the stand is good quality aspen with a lot of witch hazel in the understory. As you get into the south half quality diminishes, less
	Red Maple	10	Pole/Log	9		ed Maple	Medium	10 - 20 feet	Sapling	witch hazel, and more quaking aspen.
	Red Oak	8	Pole/Log	9	Wi	itch Hazel	Medium	5 - 10 feet	Tall Shrub	
	Paper Birch	2	Pole	8	Pi	in Cherry	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	35	Pole/Log	9		Beech	Low	5 - 10 feet	Sapling	
	Quaking Aspen	45	Pole/Log	9 49						
44	330 - Low-l	Density Tre	es	Nonstocked	7.1			No		Scattered cherry along with some very low quality stems of aspen, old railroad grade in the middle of the stand.
45	310 - Herbac	eous Open	land	Nonstocked	1.0					Gas well, BreitBurn Operating State Charleton 1-8.
46	310 - Herbac	eous Open	land	Nonstocked	1.0					Gas well, BreitBurn Operating State Charleton 4-5.
47	4125 - Blac	ck, N. Pin O	ak S	awtimber Mediun	n 1.7	95	51-80	N/A		This was part of a 2004 sale that included the final harvest of stand #49
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	immediately adjacent. This portion of the sale had all of the oak left for residual. Small stand with oak in the overstory and mostly red maple
	White Oak	10	Log	12	Re	ed Maple	Medium	10 - 20 feet	Sapling	underneath from the harvest.
Ν	Northern Pin Oak	90	Log	15 95	W	hite Pine	Low	10 - 20 feet	Sapling	
					North	ern Pin Oak	Low	< 5 feet	Sapling	
					Bigto	ooth Aspen	Low	10 - 20 feet	Sapling	
48	310 - Herbac	eous Open	land	Nonstocked	1.1					Gas well, BreitBurn Operating State Charleton 5-5.

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Stand	Level 4 C	over Type	;	Size De	ensity	Acres	Stand Age E	BA Range	Managed	Site	General Comments
49	4130	- Aspen		Sapling	g Well	19.9	17	Immature	N/A		This was harvested in 2004. There are widely scattered oak residual
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	trees in addition to the larger reserve area that is now called stand #47 Good aspen regeneration growing with scattered white pine poles
	Red Maple	15	Sapling	3		Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub	throughout.
	Red Oak	2	Log/XLog	17				'	1		
	Bigtooth Aspen	70	Sapling	4	17						
1	Northern Pin Oak	6	Sapling	2							
	White Pine	5	Pole	6							
	Pin Cherry	2	Sapling	2							
50	4130	- Aspen	F	oletimb	er We	ll 66.4	49	51-80	N/A		According to records this stand was part of a large timber harvest done
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	1972. In general, this stand is much lower quality than the adjacent stand #43. Occasional oak appear to have been left in this portion of the
	Red Maple	20	Pole	9		Re	ed Maple	High	10 - 20 feet	Sapling	sale area. Overall this is a low quality aspen stand with a well developed
	Quaking Aspen	70	Pole/Log	9	49	Wit	tch Hazel	Low	5 - 10 feet	Tall Shrub	understory, mostly consisting of red maple.
1	Northern Pin Oak	2	Log/Pole	11		Servicebe	erry (Juneberry)	Low	5 - 10 feet	Tall Shrub	
	Black Cherry	2	Pole	7		Hawt	thorn (spp.)	Low	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	6	Pole/Log	9		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
						North	ern Pin Oak	Low	5 - 10 feet	Sapling	
						Qual	king Aspen	Low	Variable	Sapling	
51	4123 -	Red Oak	S	Sawtimb	er We	II 33.3	95	111-140	N/A		This is good quality red oak, just a few aspen mixed in. Understory is pretty light, just starting to see some dieback on the oak.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	pretty light, just starting to see some dieback on the bak.
	Red Maple	15	Pole/Log	9		Re	ed Maple	Low	10 - 20 feet	Sapling	
	Red Oak	80	Log	13	95		Beech	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	2	Log/Pole	11		W	hite Pine	Trace	5 - 10 feet	Sapling	
	White Oak	3	Log/Pole	11			tch Hazel	Low	5 - 10 feet	Tall Shrub	
						R	Red Oak	Trace	< 5 feet	Sapling	
52	4310 - Pi	ne, Oak Mix	C P	oletimb	er Poo	or 8.0	80	1-50	N/A		Harvested in 2015, a mix of white pine, red pine, oak, aspen, and red naple were left (20-30BA). Small pockets of white pine saplings/poles
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Inable were left (20-306A). Small pockets of write pine sapilities/poles left out of sale area in the SE portion of stand. Decent oak regeneratio
	Red Maple	10	Pole	9		Re	ed Maple	Low	5 - 10 feet	Sapling	is now in the understory. Fails original objective, accepting current
	Red Oak	20	Log	14			Beech	Low	< 5 feet	Sapling	regeneration through 2021 compartment review.
	Bigtooth Aspen	20	Log	12		R	led Oak	Medium	< 5 feet	Sapling	
	White Pine	35	Pole/Log	9	80	W	hite Pine	Low	Variable	Sapling	
	Red Pine	15	Log/Pole	11		Wit	tch Hazel	Low	5 - 10 feet	Tall Shrub	
		<u>.</u>				Asp	oen (spp.)	Low	5 - 10 feet	Sapling	
						W	hite Oak	Low	< 5 feet	Sapling	
										0 "	

< 5 feet

Low

Sapling

Black Cherry



Stand	Level 4 C	over Type	\$	Size Density	Acres	Stand Age B	A Range	Managed \$	Site	General Comments			
53	4199 - Other Mixe	d Upland D	eciduous	Sapling Well	/ell 12.6	6	Immature	N/A		Harvested in 2015, scattered white pine and oak left. Oak and red map			
	Canopy Species % Cover		Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stump sprouts 6 to 8 ft tall, oak sprouted pretty good here. More oak underneath the browse line will hopefully recruit over time. Fails oak N			
	Red Oak	1	Log	12	Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub	but accepting current regeneration through 2021 compartment review.			
	White Oak	1	Log/Pole	10						_			
	Red Maple	50	Sapling	1 6									
	Red Oak	35	Sapling	1									
	White Oak	10	Sapling	1									
	White Pine	3	Pole/Sapling	5									
54	310 - Herbac	eous Open	and	Nonstocked	1.3					Gas well, BreitBurn Operating State Charleton 6-5.			
55	4130	- Aspen	P	oletimber Well	15.0	44	51-80	N/A		This stand was harvested in 1977, scattered oak residual was left			
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	throughout. Diameters are variable, north end seems smaller and needs more time to grow.			
	Red Maple	20	Pole	6	Pi	n Cherry	Low	5 - 10 feet	Sapling	nisio unio to giom			
	Quaking Aspen	64	Pole	6 44	North	ern Pin Oak	Low	5 - 10 feet	Sapling				
1	Northern Pin Oak	5	Pole	6	Re	ed Maple	Medium	5 - 10 feet	Sapling				
1	Northern Pin Oak	5	Log	12						-			
	Bigtooth Aspen	5	Pole	7									
	Red Pine	1	Log	14									
56			19.1	25	1-50	N/A		This was part of a 1993 harvest, the two areas making up this stand were cut leaving only a few widely scattered residual oak. Just becoming a					
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Canopy Species Witch Hazel			Avg. Height	Size	pole stand, the east polygon seems to be better quality than the west.			
	Red Maple	5	Sapling/Pole	4			Low	< 5 feet	Tall Shrub				
1	Northern Pin Oak	2	Log	17		ern Pin Oak	Low	5 - 10 feet	Sapling	edge (east of the powerline). This was not included in the 1993 harvest.			
	Red Oak	5	Sapling/Pole	4	Re	ed Maple	Low	Variable	Sapling				
	Bigtooth Aspen	55	Pole/Sapling	5 25									
	Pin Cherry	3	Sapling	4									
	Quaking Aspen	30	Sapling/Pole	4									
57	330 - Low-	Density Tre	es	Nonstocked	18.4			No		Sparse cherry, aspen, serviceberry, with some oak filling in.			
58	4199 - Other Mixe	d Upland D	eciduous Sa	apling Medium	16.6	7	mmature	N/A		Stand was harvested in 2014, scattered log oak and pole white pine left			
	Canopy Species	% Cover	Size Class	DBH Age						throughout. Regeneration is the typical mixed upland deciduous, some areas are still filling in. Fails "oak dominated" management objective, but			
	Red Oak	2	Log	16						would like to accept the regeneration that we have here. Approved to			
	White Pine	5	Pole	6						accept regeneration through 2021 compartment review.			
	Red Maple	43	Sapling	1 7									
	Red Oak	15	Sapling	1									
	Bigtooth Aspen	35	Sapling	1									



Stand	Level 4 C	over Type		Size Density	/ Acres	Stand Age B	BA Range Managed		Site	General Comments
59	310 - Herbac	eous Open	land	Nonstocked	1.0					Gas well, BreitBurn Operating State Charleton 2-8.
60	4123 -	Red Oak		Sawtimber W	ell 5.3	90	51-80	N/A		This was part of a 1993 harvest with adjacent stand 56. This portion of
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	the sale only involved the removal of the aspen component from that portion of the stand on the west side of Douglas Lake Road. As such
	Red Maple	25	Log/Pole	10		Beech	Low	5 - 10 feet	Sapling	there still is some mature aspen on the east side of the road. Aspen is
	Red Oak	65	Log	15 90	Bigt	ooth Aspen	Medium	10 - 20 feet	Sapling	encroaching from the adjacent stand, some blowdown at the north end.
	Paper Birch	3	Pole	9	W	itch Hazel	Low	< 5 feet	Tall Shrub	
	Bigtooth Aspen	2	Log/Pole	12	F	Red Oak	Low	5 - 10 feet	Sapling	
	White Oak	5	Log	12			1	1	1	
61	330 - Low-Density Trees Nonstocked				I 14.3			No		Scattered cherry, maple, oak, and serviceberry.
62	310 - Herbac	eous Open	land	Nonstocked	1.0					Gas well, BreitBurn Operating State Charleton 2-5.
63	4139 - Aspen,	Mixed Deci	duous	Poletimber W	ell 22.0	40	51-80	N/A		According to records this stand was harvested by numerous small operators during the early 1980's. There are occasionally some larger
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	aspen and maple, probably sub-merchantable at the time of harvest.
	Red Maple	40	Pole	7	R	ed Maple	Medium	Variable	Sapling	
	Bigtooth Aspen	40	Pole	7 40		Beech	Low	5 - 10 feet	Sapling	
	Red Oak	5	Log/Pole	10	W	itch Hazel	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	15	Pole	7	Р	in Cherry	Low	5 - 10 feet	Sapling	
					Serviceb	erry (Juneberry)	Low	5 - 10 feet	Tall Shrub	
64	310 - Herbac	eous Open	land	Nonstocked	I 1.0					Gas well, BreitBurn Operating State Charleton 1-5.
65	4123 - Red Oak			Sawtimber W		25.5 95		N/A		This oak stand has a nicely developed white pine understory. Oak along south edge is declining, look to harvest. Small piece (<2 acre) across the
	Canopy Species	% Cover				anopy Species	Density	Avg. Height	Size	valley (stand 102) is the same as this, so added to make a multi polygor
	Red Maple	20	Log/Pole	10		ed Maple	Low	10 - 20 feet	Sapling	stand.
	Red Oak	60	Log	14 95	W	hite Pine	Medium	10 - 20 feet	Sapling	
	White Oak	10	Pole/Log	9						
	Bigtooth Aspen	5	Log/Pole	11						
	White Pine	3	Log	16						
	Red Pine	2	Log	12						
66	330 - Low-	Density Tre	es	Nonstocked	9.0			No		Open stand with low quality aspen, cherry, and jack pine. Also a good amount of serviceberry throughout.



Stand	and Level 4 Cover Type		s	ize De	nsity	Acres	Stand Age B	Managed S	Site	General Comments	
67	4130	- Aspen	Po	oletimb	er Well	69.5	37	51-80	N/A		Harvested in 1984 leaving no residual. Good quality, dense aspen stand.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	15	Pole	6		I	Beech	Low	10 - 20 feet 5 - 10 feet	Sapling Tall Shrub	
	Red Oak	5	Pole	6		Wit	tch Hazel	Medium			
	Bigtooth Aspen	80	Pole	6	37	Northe	ern Pin Oak	Low	5 - 10 feet	Sapling	
						Re	ed Maple	Low	10 - 20 feet	Sapling	
68	4130) - Aspen		Poletimber Well		36.3	37	51-80	N/A		This stand was cut in 1984 along with the adjacent stand #67. This
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	portion of the harvest lies on a slight west facing side hill and is lower quality and smaller diameter, just becoming pole size. Much more oak
	Red Maple	10	Sapling/Pole				ch Hazel	Medium	5 - 10 feet	Tall Shrub	
	Red Oak	10	Pole	6		Wh	hite Pine	Low	Variable	Sapling	
	Bigtooth Aspen	67	Pole/Sapling	5	37			,			•
	White Pine	10	Pole	6							
	White Oak	3	Pole	6							
69	310 - Herbaceous Openland Nonstocked		1.2					Gas well, BreitBurn Operating State Charleton 4-7.			
70	310 - Herbaceous Openland Nonstocked			1.7					Gas well, BreitBurn Operating State Charleton 3-8.		
71	310 - Herbaceous Openland Nonstocked			1.1					Gas well, BreitBurn Operating State Charleton 3-5.		
73	623 - Emergent Wetland Nonstocked				0.8			No		Wet, no vegetation showing through the ice.	
74	4311 - Pine, Aspen Mix			Poletimber Well		3.4	60	1-50	N/A		This stand was included in the same 1984 harvest of stands #68 and #67
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	adjacent. This area of the sale had sub-merchantable white pine that were left during the harvest which is why this stand is now more of a
	White Pine	50	Pole/Log	9	60	Re	ed Maple	Low	10 - 20 feet	Sapling	pine/aspen mix. The aspen/maple regeneration from the harvest is now
	Bigtooth Aspen	20	Pole	5	37	Bigtooth Aspen		Low	>20 feet	Sapling	just becoming pole size.
	Red Maple	20	Sapling/Pole	4							•
	Red Oak	10	Pole/Sapling	5							



30 - Aspen 5	Sapling Sapling Sapling Log Log Sapling Sapling	2	1.4 Sub-Ca Re Will North	anopy Species erry (Juneberry) 90 anopy Species ed Maple hite Pine ern Pin Oak	Density 51-80 Density Low Medium Medium	N/A Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet Variable 5 - 10 feet	Size Tall Shrub Size Sapling Sapling	Harvested in 2004, some oak and pine residual was left. North part of stand is most dense near the gas well, some pine seeding in. Gas well, BreitBurn Operating State Charleton 5-8. Jack pine is overmature and falling out. Overall this is a mixed pine overstory with a pretty well developed oak/pine understory.
14 45 2 2 2 10 25 paceous Oper	Sapling Sapling Sapling Log Log Sapling Sapling Sapling Pine r Size Class Pole Log Pole	2	1.4 Sub-Ca Re Will North	90 anopy Species ed Maple hite Pine	51-80 Density Low Medium	N/A Avg. Height 5 - 10 feet Variable	Size Sapling Sapling	Gas well, BreitBurn Operating State Charleton 5-8. Jack pine is overmature and falling out. Overall this is a mixed pine
45	Sapling Sapling Log Log Sapling Sapling Sapling Pine r Size Class Pole Log Pole	2 17 2 14 14 14 2 2 2 Nonstocked Sawtimber We DBH Age 7 13 8	1.4 1.3 Sub-Ca Re Wi North	90 anopy Species ed Maple hite Pine	51-80 Density Low Medium	N/A Avg. Height 5 - 10 feet Variable	Size Sapling Sapling	Gas well, BreitBurn Operating State Charleton 5-8. Jack pine is overmature and falling out. Overall this is a mixed pine
2 2 2 10 25 25 25 25 25 25 25 25 25 25 25 25 25	Sapling Log Log Sapling Sapling Nand Pine r Size Class Pole Log Pole	2 14 14 2 2 2 2 Nonstocked Sawtimber We DBH Age 7 13 8	Sub-Ca	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	Jack pine is overmature and falling out. Overall this is a mixed pine
2 2 10 25 25 25 26 26 26 2 18 10 30 30	Log Log Sapling Sapling nland Pine r Size Class Pole Log Pole	14 14 2 2 2 2 Nonstocked Sawtimber We DBH Age 7 13 8	Sub-Ca	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	Jack pine is overmature and falling out. Overall this is a mixed pine
2 10 25 paceous Operatural Mixed 8 % Cover 18 10 30	Log Sapling Sapling Inland Pine r Size Class Pole Log Pole	Nonstocked Sawtimber We DBH Age 7 13 8	Sub-Ca	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	Jack pine is overmature and falling out. Overall this is a mixed pine
aceous Operatural Mixed S ** Coveration 10 18 10 30	Sapling Sapling nland Pine r Size Class Pole Log Pole	2 2 Nonstocked Sawtimber We DBH Age 7 13 8	Sub-Ca	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	Jack pine is overmature and falling out. Overall this is a mixed pine
25 paceous Oper latural Mixed s % Cover 2 18 10 30	Sapling Pine r Size Class Pole Log Pole	Nonstocked Sawtimber We DBH Age 7 13 8	Sub-Ca	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	Jack pine is overmature and falling out. Overall this is a mixed pine
latural Mixed S % Cover 2 18 10 30	Pine r Size Class Pole Log Pole	Nonstocked Sawtimber We DBH Age 7 13 8	Sub-Ca	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	Jack pine is overmature and falling out. Overall this is a mixed pine
atural Mixed	Pine r Size Class Pole Log Pole	Sawtimber We DBH Age 7 13 8	Sub-Ca	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	Jack pine is overmature and falling out. Overall this is a mixed pine
2 18 10 30	Pole Log Pole	7 13 8	Sub-Ca Re W North	anopy Species ed Maple hite Pine	Density Low Medium	Avg. Height 5 - 10 feet Variable	Sapling Sapling	
2 18 10 30	Pole Log Pole	7 13 8	Re W	ed Maple hite Pine	Low Medium	5 - 10 feet Variable	Sapling Sapling	oversiony with a pretty well developed damplife dilidersiony.
18 10 30	Log Pole	13	W North	hite Pine	Medium	Variable	Sapling	
10	Pole	8	North					
30				ern Pin Oak	Medium	E 10 foot		
	Log	12			IVICAIAIII	5 - 10 leet	Sapling	
25			W	hite Oak	Low	5 - 10 feet	Sapling	
აა	Log/Pole	10 90						
5	Pole	8						
Natural Jack I	Pine P	oletimber Medi	um 4.0	45	1-50	N/A		Open grown jack pine of all sizes.
s % Cove	r Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
88	Pole	7 45	R	Red Oak	Low	5 - 10 feet	Sapling	
3	Log	13	Servicebe	erry (Juneberry)	Low	10 - 20 feet	Sapling	
7	Pole/Log	9	Ja	ack Pine	Low	Variable	Sapling	
2	Pole	7	R	led Pine	Low	Variable	Sapling	
79 4130 - Aspen Poletin		Poletimber We	ell 2.1	40	51-80	N/A		Couldn't find any record of cutting. Small, skinny stand that doesn't fit
s % Cove	r Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	with any of the adjacent stands.
20	Pole	7	Re	ed Maple	Medium	>20 feet	Sapling	
80	Pole	7 40	Wit	tch Hazel	Low	5 - 10 feet	Tall Shrub	
				Beech	Low	5 - 10 feet	Sapling	
			North	ern Pin Oak	Low	5 - 10 feet	Sapling	
	88 3 7 2 30 - Aspen S % Cove 20 80	88	88 Pole 7 45 3 Log 13 7 Pole/Log 9 2 Pole 7 30 - Aspen Poletimber We s % Cover Size Class DBH Age 20 Pole 7	88	88 Pole 7 45 Red Oak 3 Log 13 Serviceberry (Juneberry) 7 Pole/Log 9 Jack Pine 2 Pole 7 Red Pine 30 - Aspen Poletimber Well 2.1 40 8 **Cover Size Class **DBH Age Sub-Canopy Species 20 Pole 7 Red Maple 80 Pole 7 40 Witch Hazel Beech Northern Pin Oak	88	88 Pole 7 45 Red Oak Low 5 - 10 feet 3 Log 13 Serviceberry (Juneberry) Low 10 - 20 feet 7 Pole/Log 9 Jack Pine Low Variable 2 Pole 7 Red Pine Low Variable 30 - Aspen Poletimber Well 2.1 40 51-80 N/A 8 **Cover Size Class **DBH Age Sub-Canopy Species **Density **Avg. Height 80 Pole 7 40 Witch Hazel Low 5 - 10 feet 8eech Low 5 - 10 feet Northern Pin Oak Low 5 - 10 feet	88 Pole 7 45 Red Oak Low 5 - 10 feet Sapling 3 Log 13 Jack Pine Low Variable Sapling 7 Pole/Log 9 Jack Pine Low Variable Sapling 2 Pole 7 Red Pine Low Variable Sapling 30 - Aspen Poletimber Well 2.1 40 51-80 N/A S % Cover Size Class DBH Age 20 Pole 7 Red Maple Red Maple Medium Size Sapling 80 Pole 7 40 Witch Hazel Low 5 - 10 feet Sapling Northern Pin Oak Low 5 - 10 feet Sapling



Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments	
81	4123 -		Sawtimber Well		40.2	95	81-110	N/A		This stand was selectively thinned in 2006. Occassional species other than oak were left for diversity. A treatment to utilize anchor chains for		
	Canopy Species	% Cover	Size Class	DBF	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	soil scarification was varianced due to the high residual BA in the stand.	
	Red Maple	2	Pole	7		Re	ed Maple	Medium	10 - 20 feet	Sapling	BA is now ~100 sq feet. Understory is mostly red maple, white pine and	
	Red Oak	85	Log/Pole	12	95	R	ed Oak	Low	5 - 10 feet	Sapling	witch hazel. More white pine in the understory in the west half vs the east	
	White Oak	7	Pole/Log	9		W	hite Pine	Medium	10 - 20 feet	Sapling	half. There is oak in the understory, I would say its on the upper end of "low".	
	Bigtooth Aspen	2	Log	12		Wi	tch Hazel	Medium	5 - 10 feet	Tall Shrub		
	Red Pine	1	Log	12								
	White Pine	3	Pole/Log	8								
82	330 - Low-Density Trees Nonstocked		2.7			No		Open valley with scattered cherry. Old white pine stumps with burn scars throughout.				
83	4139 - Aspen,	Mixed Decid	duous	Sapling	y Well	35.4	17	Immature	N/A		This was cut in 2004 along with stand 97 to the south, scattered oak we	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	left during harvest. Stand is now dense regeneration with scattered log oak.	
	Red Maple	40	Sapling	3	17		tch Hazel	Low	< 5 feet	Tall Shrub		
	Beech	2	Sapling	3								
	Red Oak	5	Sapling	3								
	Red Oak	5	Log	13								
	Bigtooth Aspen	35	Sapling	4	17							
	Quaking Aspen	13	Sapling	3								
84	330 - Low-	Density Tre	es	Nonsto	ocked	7.3			No		Open area with cherry, oak, and scattered shrubs.	
85	4310 - Pi	ne, Oak Mix	(Sawtimb	er Well	8.5	90	81-110	N/A		For the most part this stand lies on a west facing side hill that leads	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	to the adjacent lowland area. Jack pine is slowly dying out, a fairly heavy understory is developing as a result. This stand has been left uncut	
	Red Maple	10	Pole	9		Re	ed Maple	Medium	< 5 feet	Sapling	during previous harvest operations most likely in an effort to protect the	
	Bigtooth Aspen	15	Log/Pole	10			Beech	Low	< 5 feet	Sapling	side hill.	
	Northern Pin Oak	15	Log	14		Ва	ılsam Fir	Low	< 5 feet	Sapling		
	Red Pine	10	Log	13		Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub		
	Jack Pine	45	Log/Pole	11	90	Servicebe	erry (Juneberry) Low	5 - 10 feet	Tall Shrub		
	White Oak	5	Pole/Log	9		North	ern Pin Oak	Medium	5 - 10 feet	Sapling		
86	42111 - Planted Dec	d Red Pine, iduous	Mixed	ed Sapling Poor		17.5	4	Immature	N/A		There is a long history for this stand, it was harvested in 2010 as part of the red pine project. It was planted in 2011, release sprayed in 2012, but	
	Canopy Species	% Cover	Size Class	DBH	I Age						then failed year 3 regen survey in 2015. Site was then roller chopped in 2015, sprayed and trenched in 2016, and replanted in May 2017. Site	
	Red Pine	75	Sapling	1	4						was replanted again in 2019 and year 1 regen survey was completed	
	Black Cherry	20	Sapling	1							9/21/20. Results indicate 687 RP/acre, 72% free to grow. Red pine now	
	Red Maple	5	Sapling	1							is variable in height due to multiple plantings (2-6ft tall), black cherry and red maple also growing in the stand. FTP 52-299.	

Gaylord Mgt. Unit

Report 7 - Stands



Stand	d Level 4 Co	over Type	;	Size De	nsity	Acres	Stand Age E	BA Range	Managed	Site	General Comments	
87	4130	- Aspen		Sapling	Well	6.8	15	Immature	N/A		These two harvest areas were cut in 2006 as part of a larger sale that included the selective thinning of the adjacent oak, stand 81. These	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	areas were essentially clearcut although a few oak residual stems were	
	Red Maple	25	Sapling	2		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	left. This stand has dense aspen and maple regeneration, the east	
	Red Oak	2	Log	14							polygon is taller than the west.	
	Red Oak	8	Sapling	2								
	Bigtooth Aspen	65	Sapling	2	15							
88	310 - Herbaco	eous Open	ıland	Nonsto	cked	1.0					Gas well, VCP Michigan LLC State Charleton B 2-4.	
89	310 - Herbaco	eous Open	ıland	Nonsto	cked	3.2			No		A 100 foot wide utility corridor easement.	
90	623 - Emer	gent Wetla	ind	Nonsto	cked	6.8			No		Very wet, open with grasses and some pockets of leatherleaf.	
92	310 - Herbaco	eous Open	ıland	Nonsto	cked	1.0					Gas well, BreitBurn Operating State Charleton 5-4.	
93	4199 - Other Mixed	d Upland D	eciduous P	oletimb	er Well	12.6	37	1-50	N/A		This stand was cut in 1984 leaving some residual red pine. Stand	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	diameters are variable, but overall stand is just becoming pole sized.	
	Red Maple	45	Sapling/Pole	4	37	Pir	n Cherry	Low	5 - 10 feet	Sapling		
	Quaking Aspen	20	Pole/Sapling				Beech	Low	5 - 10 feet	Sapling		
	Northern Pin Oak	30	Pole/Sapling	5		Re	d Maple	Low	5 - 10 feet	Sapling		
	Red Pine	5	Log/Pole/XLog	g 10								
94	4139 - Aspen, I	Mixed Deci	iduous	Sapling	Well	6.2	17	Immature	N/A		This stand was harvested in 2004, residual log sized oak left through	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Small inclusion (<1acre) of mature red maple and aspen with some planted red pine underneath in the NW corner of the stand.	
	Red Maple	45	Sapling	3	17		ch Hazel	Low	< 5 feet	Tall Shrub	planted red pine didefined in the 1444 comer of the stand.	
	Red Oak	5	Sapling	3				1	1	1		
	Red Oak	5	Log	13								
	Bigtooth Aspen	43	Sapling	3	17							
	Red Pine	2	Pole/Log	9								
95	42200 - Natu			awtimb		6.3	95	1-50	N/A		This stand was cut in 2004 when the adjacent stand #97 was also cut. This portion of the harvest area left all pine as part of the cutting specs,	
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	now has a thick understory of aspen, maple.	
	Red Oak	5	Log	16			d Maple	High	>20 feet	Sapling		
	White Pine	80	Log	14	95		Beech	Low	5 - 10 feet	Sapling		
								Low	E 10 foot	Camilian		
	Red Pine	15	Log	15			ed Oak oth Aspen	Low	5 - 10 feet >20 feet	Sapling Sapling		



Stand	Level 4 C		Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments			
96	330 - Low-l	Density Tree	es	Nonstocked		17.3	0	Unspecified	No		Scattered good quality red oak left from seed tree harvest completed 12/18/2018. Not enough canopy closure to be coded as a forested stand. It has been only 2 growing seasons, but regeneration is dominated by red maple (3-4ft tall). Heavy deer browse on everything.		
97	4139 - Aspen,	Sapling	Well	25.8	17	Immature	N/A		This stand was cut in 2004 along with stand 83. Scattered log sized oak				
	Canopy Species	% Cover	Size Class	DBH Age		Sub-Canopy Speci		es Density	Avg. Height	Size	throughout that was left during the harvest. Stand is pretty dense with a few open areas.		
	Red Maple	30	Sapling	3		Wit	ch Hazel	Low	< 5 feet	Tall Shrub			
	Quaking Aspen	35	Sapling	3	17					,	-		
1	Northern Pin Oak	5	Log	14									
1	Northern Pin Oak	5	Sapling	3									
	Red Pine	1	Log	12									
	Pin Cherry	5	Sapling	3									
	Bigtooth Aspen	18	Sapling	4									
	White Oak	1	Log	12									